

ABSTRACT OF THE DISCLOSURE

The present invention relates to a computer network and a method for using the network. The network and method employ powered multiplexing connection devices which electronically couple two or more network devices to the network. The signals from the network devices to the network are multiplexed at the powered multiplexing connection devices and the signals from the network to the network devices are demultiplexed at the powered multiplexing connection devices. The multiplexing enables the various work-center devices to communicate with the network and, in some cases, to receive power over the network connection. The intelligent electronic circuitry is also capable of aiding in network security and management and in monitoring the status of the network infrastructure. A primary advantage of the disclosed invention is an enormous reduction in the network administrator's workload in that a significant portion of the labor involved in managing and modifying a network is alleviated or obviated by the powered, intelligent, multiplexing connection devices.